

Important Advances in Clinical Medicine

Epitomes of Progress -- Radiology

The Scientific Board of the California Medical Association presents the following inventory of items of progress in Radiology. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, both as to scientific fact and important clinical significance. The items are presented in simple epitome and an authoritative reference, both to the item itself and to the subject at a whole is generally given for those who may be unfamiliar with a particular item. The purpose is to assist the busy practitioner, student, research worker or scholar to stay abreast of these items of progress in Radiology which have recently achieved a substantial degree of authoritative acceptance, whether in his own field of special interest or another.

The items of progress listed below were selected by the Advisory Panel to the Section on Radiology of the California Medical Association and the summaries were prepared under its direction.

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Perinatal Pulmonary Roentgenography

Since 1960 increased utilization of radiographic examination of the newborn chest has played an important role in the recognition of three new syndromes of newborn pulmonary disease:

1. **Bronchopulmonary Dysplasia** — This syndrome is characterized by a history of severe hyaline membrane disease treated with prolonged artificial ventilation and high concentrations of supplemental oxygen and a radiologic picture of focal hyperexpansion of the lungs.

2. **Wilson-Mikity Syndrome** — This relatively late arising chronic pulmonary disease in very low birth weight premature infants is also characterized

by a radiologic picture of focal hyperexpansion of the lungs. A history of artificial ventilation is not present though the administration of low concentrations of supplemental oxygen is frequent. Because of the similar radiographic picture, common etiologic factors are postulated to be present in Bronchopulmonary Dysplasia and Wilson-Mikity Syndrome.

3. **Transient Tachypnea of the Newborn** — This disorder mimics mild congestive heart failure in the immediate newborn period with radiographic changes characteristic of pulmonary vascular congestion and interstitial edema. Clinical evidence of congestive heart failure is not present, and as its name implies, all findings clear in one